[FIG.1]

CELL A

CELL B

5 [FIG.2]

FREQUENCY

CELL A

CELL B

TIME

10 COLLISION OF HOPPING PATTERNS

[FIG.3]

QUALITY

QUALITY DETERIORATION DUE TO COLLISION

15 SYMBOL

[FIG.4]

100 OFDM RECEPTION APPARATUS

101 RECEPTION RF SECTION

20 104 PILOT RECEPTION POWER MEASURING SECTION

105 DATA SECTION RECEPTION POWER MEASURING SECTION

PILOT/DATA POWER RATIO INFORMATION

106 DATA SECTION RECEPTION POWER PREDICTION SECTION

107 POWER COMPARISON SECTION

25 COLLISION POSITION INFORMATION

103 ERROR CORRECTING/DECODING SECTION

108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION

[FIG.5]

POWER

5   POWER INCREASE DUE TO COLLISION

SYMBOL

[FIG.6]

POWER

10   SYMBOL

POWER DECREASE DUE TO COLLISION

[FIG.7]

OTHER CELL SIGNAL

15   OWN CELL SIGNAL

RECEIVED SIGNAL

ACTUAL RECEPTION POWER

RECEPTION POWER PREDICTED FROM PILOT

20   [FIG.8]

OWN CELL SIGNAL

OTHER CELL SIGNAL

RECEIVED SIGNAL

ACTUAL RECEPTION POWER

25   RECEPTION POWER PREDICTED FROM PILOT

[FIG.9]

200   OFDM RECEPTION APPARATUS

101 RECEPTION RF SECTION

104 PILOT RECEPTION POWER MEASURING SECTION

105 DATA SECTION RECEPTION POWER MEASURING SECTION

PILOT/DATA POWER RATIO INFORMATION

5 106 DATA SECTION RECEPTION POWER PREDICTION SECTION

103 ERROR CORRECTING/DECODING SECTION

COLLISION POSITION INFORMATION

107 POWER COMPARISON SECTION

201 ERROR RATE CALCULATION SECTION

10 202 THRESHOLD CONTROL SECTION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION

15

[FIG.10]

300 OFDM RECEPTION APPARATUS

101 RECEPTION RF SECTION

104 PILOT RECEPTION POWER MEASURING SECTION

20 105 DATA SECTION RECEPTION POWER MEASURING SECTION

PILOT/DATA POWER RATIO INFORMATION

106 DATA SECTION RECEPTION POWER PREDICTION SECTION

301 RECEPTION AVERAGE SIR DETCTION SECTION

107 POWER COMPARISON SECTION

25 302 TABLE SECTION

103 ERROR CORRECTING/DECODING SECTION

COLLISION POSITION INFORMATION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION

5   [FIG.11]

PERFORMANCE (ERROR RATE)

BAD

GOOD

SMALL

10 LARGE

THRESHOLD

[FIG.12]

400 OFDM RECEPTION APPARATUS

15 101 RECEPTION RF SECTION

104 PILOT RECEPTION POWER MEASURING SECTION

105 DATA SECTION RECEPTION POWER MEASURING SECTION

401 RECEPTION AVERAGE SIR DETECTION SECTION

PILOT/DATA POWER RATIO INFORMATION

20 106 DATA SECTION RECEPTION POWER PREDICTION SECTION

402 TABLE CREATION SECTION

103 ERROR CORRECTING/DECODING SECTION

COLLISION POSITION INFORMATION

107 POWER COMPARISON SECTION

25 403 ERROR RATE CALCULATION SECTION

404 THRESHOLD CONTROL SECTION

THRESHOLD

108 COLLISION POSITION DETECTION SECTION

DECODED DATA

HOPPING PATTERN INFORMATION